English Language Learners' Perceptions and Experiences of an English Mobile Urban Game

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Abstract: This study aims to explore English language learners' (ELLs) perceptions and experiences of a mobile urban game. How ELLs perceive its value for English learning and exploit the affordances of the mobile game are emphasized. Through the data analysis of 15 ELLs' recorded gaming processes, written reflections, and interviews, this study reported that these ELLs perceive the mobile urban game to be useful in creating meaningful and authentic English language learning opportunities. In addition, they exploit multiple mobile applications (e.g., search engines, online chatting tools, online dictionaries, google maps, built-in cameras) and interact with social members in their surroundings (e.g., peers, the instructor, vendors, foreign visitors) for the game quests. Future research can examine larger study population's experiences of similar mobile urban games and explore how social members can facilitate ELLs' language learning processes in the game.

Keywords: mobile urban game, mobile location based game, mobile game, gamification, English language learning

1. Introduction

In recent years, mobile games have received increasing attention in the field of second and foreign language (hereafter L2) education. Featured with portability, social interactivity, context sensitivity, connectivity, and individuality (Squire & Klopfer, 2007), mobile games can offer ubiquitous, interactive, contextualized, authentic, and personalized learning environments for L2 learners (Holden & Sykes, 2011). Harnessing these features, a few scholars have started to investigate how to integrate mobile location-based game in L2 classrooms (Holden & Sykes, 2013; Perry, 2015). Different from immersive digital games that involve players solely in virtual spaces, mobile location-based games integrate the physical and the virtual in a gameplay. Players use a physical public space, such as a museum or a town, as the game board, and move around the assigned geographical locations in reality, to gather real-world materials, items and clues, while solving problems and completing missions in the virtual gameplay (Pitura & Terlecka-Pacut, 2018). Encouragingly, research shows that some L2 learners exploit artifacts, materials and social members distributed in their surroundings to accomplish game quests during the gameplay (Thorne & Hellermann, 2017). Studies in this line can continue to contribute to our understanding of L2 learning in mobile gaming contexts.

The purpose of this study is to explore English language learners' (hereafter ELLs) perceptions and experiences of an English mobile urban game, a type of mobile location-based games that integrates virtual-physical spaces and exploits the portability, the social interactivity, and the context sensitivity features of portable devices. How ELLs perceive its value for English learning and exploit game-mediated affordances for game quests/challenges are emphasized.

2. Research Methodology

2.1 The Mobile Urban Game: Scavenger Hunt in YanCheng

The English mobile urban game of this study, *Scavenger Hunt in YanCheng*, aims to familiarize students with cultural concepts and artifacts, and their associated English expressions that can be used

to introduce local communities and histories in town. On the basis of experiential learning and situated problem solving, the researcher designed 7 challenges/quests in relation to the local areas/shops for the players to experience English meaning making *in situ* (Thorne & Hellermann, 2017).

Game challenges, structured in the forms of riddles, crosswords, multiple-choice questions, and short-answer questions, were developed to elicit players' motivation of searching for clues and information in physical and virtual spaces. Game quests, delivered through error correction, speaking and writing tasks, were devised to encourage players to reflect, speak and write in English, and to make use of the English words, expressions and concepts they have just experienced during the game challenges.

Players used Google Form to go through the game, reading challenge/quest information and submitting answers and tasks for the game by using their mobile phones. QR codes were embedded in the Google Form for players to access context-aware information about the game

2.2 *Participants and Data Collections*

This small-scale research was conducted in an undergraduate course designed for ELLs in a university in southern Taiwan. 15 students, from Taiwan, Indonesia, Korea, France and Mainland China, were divided into 6 different groups to play the game in this study. Their English proficiency levels ranged from intermediate to advanced level based on the English standardized tests taken prior to the study.

This study was qualitative in nature. Data collections consisted of audio/video recordings of the gaming processes, students' reflections of the game, as well as stimulated recalls and interviews.

2.3 *Data Analysis*

Because this study is interested in learning about ELLs' perceptions and experiences of the English mobile urban game, their emic perspectives and gaming behaviors are taken as the primary focus in the data analysis. The researcher applied Miles, Huberman, and Saldana's (2014) guidelines for initial coding and pattern coding, allowing emerging codes and reoccurring patterns to be derived from the data (e.g., participant evaluations: authenticity; contextualization, meaningfulness; gaming behaviors: online inquiry; expert inquiry; peer discussion; vendor support; foreigner conversation, etc.). These codes and patterns were further examined for possible relationships and analyzed for explanations for their roles and importance. Clustering, matrices, and analytical memoing were used as analytical strategies to examine and document these relationships and explanations.

3. Findings and Discussion

3.1 *Student Perceptions of Game Value for English Learning*

The findings of this study suggest that the study participants hold positive opinions about the mobile English urban game. While many of them reported that they enjoy participating in the scavenger hunt situated in the game, they also appreciate the opportunities to explore the culture of the local YanCheng district.

Notably, the mobile English urban game provides the study participants great opportunities to experience English meaningfully and authentically. While the game contextualizes the participants in a meaningful English storyline, it also requires their close attention to the background information and the clues offered in the physical spaces for quest solving. Such designs encourage students to "be attentive to the historical introduction provided by the store on the site…and repeatedly engage in trial and error for problem-solving (Student C)." Meanwhile, being at the physical place where particular English expressions are used, students experience and embody the authenticity of the English language, revealing the importance of meaning making *in situ* (Thorne & Hellermann, 2017). As student D revealed in the written reflection,

> …during the time that we have spent in the coffee shop, I have learned lots of stuffs that related in coffee [in English], including the syphon coffee maker, coffee pot, and each specific step I need to do before I can get a cup of coffee.

3.2 Student Exploitation of Game-Mediated Affordances

In terms of affordances enhanced by the mobile urban game, participants in this study take advantages of mobile applications, such as search engines, online chatting tools, google maps, online dictionaries, and built-in cameras to assist them with their English game quests. Clearly, study participants exploit the portability, social interactivity, context sensitivity, connectivity, and individuality features of their mobile devices. However, peer scaffolding and instructor support remain salient during the process of quest solving. With peers in the physical space, and the instructor in the virtual space, students exploit collective (Donato, 1994) and expert scaffolding (Wood, Bruner, & Ross, 1976) for the problems they are incapable of solving independently. Interestingly, foreigner visitors and local vendors also play major roles in ELLs' quest solving. Some students reported that it was the cultural talks with the owner in the coffee shop enhanced their capability of solving the English quest in the mobile urban game.

4. Conclusions and Future Research

Although the number of the participants in this study is limited, the findings of this study can provide initial understanding about ELLs' perceptions and experiences of a mobile location-based game. Future research can apply similar designs to study larger research population and to examine ELLs' perceptions and difficulties during the gameplays. It is also worth exploring how social members (e.g., peers, experts, vendors, foreigners, etc.) can contribute to ELLs' language learning during the mobile location-based gameplay.

Acknowledgements

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